susceptible to its action, in the doses I have prescribed, yet, in nearly all, the disease yielded quickly. It is a safe and efficient remedy for pertussis in children of any age. It is very remarkable that, after the publications made by Dr. Jackson in the *Medical Journal*, we should have book after book upon the diseases of children, and the whole host of old and useless remedies for hooping-cough carefully noted, without a word in favour of belladonna.

ART. VII.—*A very large Mesenteric Tumour, simulating Ovarian Disease, successfully extirpated.* By P. J. BUCKNER, M. D., of Cincinnati, Ohio.

THE subject of the following case was under the care of G. E. Eels, M. D., of Lithopolis, Ohio. It was looked upon as a case of ovarian disease; and, believing it a favourable one for extirpation, the patient was so informed, and advised to consult G. W. Boerstler, M. D., of Lancaster. Mr. Tegarden accordingly took his wife to see Dr. Boerstler, who, upon examination of the case, concurred in the diagnosis given by Dr. Eels, and also advised its removal. Through him I was subsequently consulted by letter, and requested to undertake the operation.

Dr. Eels furnished me the following history of the case:—.

On the 15th of April, 1849, my attention was first called to the case of Mrs. Tegarden. I found her in the enjoyment of excellent health, the mother of eight children, the youngest six months old. She informed me that, soon after her last confinement, she had discovered a small tumour within the abdomen, which was increasing in size, but up to this time gave her no particular inconvenience. On making an examination, I found the tumour as had been represented, within the abdomen, about the size of an orange, occupying a central position directly above the pubis. It was movable in various directions, insensible to pressure, surface smooth.

On examination per vaginam, I became convinced it had no attachment to the uterus, but could not satisfy myself in regard to its nature or connections. How long it had existed, she could not tell; and as she had been attended by an ignorant midwife in all her confinements, nothing could be learned from that source.

She was put upon the use of iodide of potassium internally, with an occasional laxative, and the iodo-mercurial ointment externally. These agents were continued some months, from the use of which she fancied some diminution of the tumour took place. I was satisfied, however, that such was not the case, although it did not increase to any appreciable extent. Sometime in the month of April, 1850, she became pregnant, and owing to the irritability of the stomach all medication was suspended.

During the first months of gestation, the patient enjoyed a usual degree of good health, but the latter part of the period was one of continued suffering, from frequent attacks of colic. Some of these attacks were extremely severe, threatening a speedy termination in death. She, however, suffered on to the

end of the term, and on the 11th of January, 1851, after a natural and easy labour, gave birth to a full-grown, healthy, male child.

The morbid tumour was, during gestation, easily felt above and to the left of the uterus. After her confinement, the tumour was discovered to have very much increased in size, and was troublesome both on account of its weight and the obstruction which it occasioned in the intestinal tube, for attacks of colic, although not as severe, were still very distressing. By its pressure upon the fundus of the bladder, the functions of that organ were also deranged.

Under these circumstances, being convinced that the only reasonable hope of relief was a resort to an operation for the removal of the tumour, the patient was referred to my much valued friend, Dr. Boerstler, of Lancaster, for further advice. The doctor's views of the case coincided with my own; and at his suggestion, and by mutual arrangement, the case was reported to yourself, with the request that you would operate, if you should concur with us in thinking it advisable.

The patient has been made fully aware of the dangers and uncertainties attending such operations, and is extremely desirous that the operation should be performed, provided her medical advisers think her case affords as reasonable a hope of success as the majority of such cases.

Not having seen the case, but having the utmost confidence in the medical skill of my worthy friend, Dr. Boerstler (at that time having no acquaintance with Dr. Eels), I addressed a letter to the former, advising that the patient be put under suitable treatment to prepare her for the operation; that, when in a proper condition, if notified, I would visit the lady, and if I should, on seeing her, concur with them in the character of the disease, and deem an operation practicable, I would operate.

The patient was, on the 9th of September, put upon a preparatory course of treatment, consisting of low farinaceous diet, with an occasional laxative composed of blue mass and comp. ext. colocynth, which was continued up to the time of the operation.

I visited and saw the lady for the first time on the 3d of October, 1851. On examination I found a firm, rather elastic tumour, in the abdomen, in feel and appearance about the size of a man's head, occupying rather a central position, but rather the more prominent on the left side. It was smooth and spherical, and freely movable in every direction, having very little sensibility manifest on pressure. From the freedom with which it could be moved and pushed into either side, or elevated and depressed by the hand, I felt justified in the conclusion that there were no very firm adhesions, if any.

Examination per Vaginam.—I found the uterus of normal size, and *in situ*, easily moved from side to side by the index finger, apparently having no connection with the tumour; which, however, could be felt through the walls of the vagina, above and anterior to the uterus. After a careful examination of the case, I confess I was led to concur with the attending physicians in the opinion that it was ovarian in character, and presenting as favourable a case for operation as is usually met with, and so expressed myself to the patient and her friends. At the same time, I informed them of the uncertainty which attends the diagnosis of such cases, the difficulties attending the operation, as well as the danger and uncertainty of success. I further remarked to the patient and her husband that I would not advise the operation; but, if

she desired it, after having been made fully aware of the magnitude and hazard of the operation, I would operate. She remarked that her attending physician had apprised her fully of the character and danger of the operation, and that she had made up her mind to have the tumour removed.

Operation.—On the next day, the 4th of October, 1851, I proceeded to the operation, in presence of Drs. G. E. Eels, Boerstler, Minor, Potter, and several other medical gentlemen. The patient, after being suitably dressed for the operation, was placed upon a table, her head and shoulders supported by pillows, and her feet resting on two chairs. Dr. Eels administered chloroform; when fully under its influence, the abdomen was divided in the linea alba, from the umbilicus to pubis, by an incision of nine inches; the peritoneum being carefully divided, the tumour was brought to view; when, to our surprise, it was discovered that the tumour was in the *mesentery* between the lamina of the peritoneum, and surrounded by the small intestine. Here was a state of things requiring sound discriminating judgment, cool and deliberate action, certainly involving great responsibility. I need not tell the reader that no one felt it more than myself. I remarked to my medical friends, and in the presence of the husband, that we had before us a much more formidable case than we had anticipated; that, in removing the tumour, the intestine must be dissected from its connection with the mesentery twelve or fifteen inches, and great and extensive injury be done to the peritoneum; that numerous bloodvessels would be divided, and the hazard to the woman's life greatly increased beyond the common operation of ovariotomy, if she could by possibility recover at all. And I suggested that it was a grave question of duty we had to decide, whether we should close up the wound in the abdomen and leave the woman to her fate, or proceed with the operation and remove the tumour.

The husband, with great firmness and decision, replied: "*Gentlemen, I have neither advised nor opposed the operation, but have left it entirely to my wife, who determined to have it removed; as you have gone this far with it, and she cannot now be consulted (being unconscious from the action of chloroform), it is my wish that the tumour be removed.*"

It was decided that the operation should proceed. An incision was made through the peritoneum, about an inch from the intestine on each side, and parallel with it, which divided numerous small vessels, that bled freely. These incisions were each in extent over twelve inches in length. With the aid of the thin edge of the ivory handle of my scalpel, I separated, rather rudely, the peritoneum and intestine, between those incisions, from the fibrous sac of the tumour, to the extent of at least twelve inches. By this procedure the bleeding from the numerous small vessels was prevented. The intestine being now freed from the tumour, I next, in a similar manner, separated the lamina of the peritoneum on either side of the tumour, from the parallel incisions backwards towards the root of the mesentery; when, on its posterior surface, I found a considerable branch of the superior mesenteric artery entering the tumour, which supplied its nutrition. This was secured by ligature, divided, and the tumour removed. Several small arteries required to be ligated; the parts were sponged as clean as practicable, the detached intestine was folded as the link of a chain, so as to bring the raw surfaces of the intestine and peritoneal margins in contact, and the omentum majus brought down over it to hold it *in situ*. The abdomen was closed by five interrupted sutures, supported by adhesive strips, covered by compress and bandage, and the lady placed in bed.

The whole operation did not exceed thirty minutes; the patient was not restored to consciousness until after she was placed in bed; and was wholly unconscious of pain during the entire operation.

I left the patient that afternoon in the care of her family physician, Dr. Eels, who kindly furnished me the following history of the subsequent treatment and symptoms of the case:—

The prostration following the operation was very great. Pulse remained small and very feeble through the day, with cold extremities. Gave her nitrous ether twenty drops, tinct. opii five drops every hour, and dry warmth to the extremities. At 9 o'clock P. M. the patient began to revive, and at 10½ she slept quietly one hour. She awoke much refreshed, and was comfortable the remainder of the night; suspended nit. ether and tinct. opii.

October 5th. 8 o'clock A. M. Patient comfortable; pulse 100, soft and good volume; some thirst; skin natural temperature. Emptied bladder by catheter; urine one-half pint, and natural. Ordered toast or rice-water for nourishment, tinct. opii twenty-five drops, if restlessness supervened.

6th. 9 o'clock A. M. Still comparatively comfortable; pulse 110, soft; skin slightly above natural temperature and dry; great thirst set in. Bladder has been emptied three times, twice by catheter; urine high coloured, quantity one pint. Abdomen not swollen or tender on pressure; but she complains of darting, lancinating pains. Ordered ice water applied to the abdomen; sponge surface (face and hands) with tepid water, and give tinct. opii twenty-five ♏. 6 o'clock P. M. Comfortable; pulse 100, soft; skin natural; has no pain in abdomen; bladder emptied at 3 o'clock. Prescription continued.

7th. 7 A. M. Had a comfortable night, slept quietly at intervals; pulse and surface the same as at last report. Thirst urgent; abdomen slightly tumefied, but without pain or tenderness. Prescription: continue ice and ice water; tinct. opii *pro re nata.* 6 o'clock P. M. The same as this morning; urinated freely without aid; one pint, high coloured. Prescription the same as this morning, with the addition of an enema of warm water.

8th. 9 o'clock A. M. Present, Drs. Boerstler and Potter. Patient rested well; pulse 112, soft; skin soft, and a little above natural temperature; complains of no inconvenience but fatigue from her confined position. Bowels moved by enema, dejections yellow, mostly fluid; urine drawn off twice during night, natural. Abdomen less distended, and without pain or tenderness on pressure. On removing the dressings, we found that no adhesion had taken place in the integuments, and but slight appearance of lymph; condition of the subjacent muscular incision not examined. Prescription continued. 6 P. M. Same as this morning; took twenty-five drops tinct. op. at 12 o'clock, and rested well.

9th. 7 A. M. Patient had a quiet night. Pulse 105, soft; skin soft and of natural temperature; tongue moist; thirst much diminished. Urinated two or three times without aid. Abdomen slightly tumefied. 6 o'clock P. M. General symptoms same as this morning. Enema passed off coloured yellow.

10th. 9 o'clock A. M. Took tinct. opii gutt. twenty-five at 9 o'clock last evening, and rested well. Pulse 120, soft and feeble; some heat of surface. Abdomen more distinct; no pain or tenderness; urinated freely. Removed the two lower sutures; dressed the wound with adhesive straps; no adhesion of the integuments; edges of the subjacent muscular tissue in apposition and adherent. Prescription continued. 6 o'clock P. M. No change in condition of patient; continued ice water to abdomen, and ice to allay thirst; nourishment, toast or rice-water; sponge surface with tepid water; tinct. opii twenty-five drops.

11*th*. 8 o'clock A. M. Same as last report. Pulse 115, soft; skin natural; tongue moist and white; abdomen free from pain or tenderness; rather more distended. Prescription sulph. magnes. ʒij every three hours until the bowels are moved, to be hastened by an enema of warm water. 6 o'clock P. M. Symptoms same; enema came away coloured yellow. Prescription. Suspended sulph. magnes., repeat enema.

12*th*. 9 o'clock A. M. Patient took no anodyne last night; consequently, did not rest well. Complains of fatigue only. Bowels have been opened twice; discharges semi-fluid, natural; pulse 120, soft; skin moist; thirst less. Abdomen less tumefied, with no pain or tenderness on pressure. External incision presents no appearance of adhesion; edges pale and flabby; a small quantity of healthy pus at the lower angle of incision. Brought the edges in apposition, and secured them by adhesive straps. Prescription. Omitted cold-water dressings, and allowed the patient more nourishment, such as milk, weak animal broth; anodynes *pro re nata*. 6 o'clock P. M. The patient has been more comfortable than any day since the operation. Prescription continued.

13*th*. 9 o'clock A. M. Pulse 115, soft; skin soft and cool, rested well through the night. Abdomen more distended; discharge from incision more abundant. 6 o'clock P. M. No change in symptoms since morning; urinated one pint and a half, natural. Prescription. Sulph. magnes. ʒij., enema of warm water and molasses.

14*th*. 9 o'clock A. M. Patient comfortable; pulse 108, soft; skin cool; tongue moist; no thirst; some appetite; no pain or tenderness of abdomen, though more distended. Edges of integuments not united, less pale than at last dressing; bowels slightly moved. Prescription. Repeat sulph. magnesia. 6 P. M. Continues comfortable; bowels moved twice, discharges fluid and yellow. Prescription. Tinct. opii gutt. twenty-five.

15*th*. 9 A. M. Pulse 103, soft; skin natural; has had three discharges from bowels, yellow and fluid. Patient rests well, sleep quiet; pus more abundant from wound. Adhesion between the edges of the muscles appears firm; integuments adherent to the subjacent muscles. 6 P. M. No change in condition of patient. Took twenty-five ♏ tinct. opii at 12 o'clock.

16*th*. 8 A. M. Found our patient more restless; abdomen distended; pulse 115, soft; urine copious and natural; skin cool; some thirst; face flushed. Prescription. Morphine gr. half. 6 P. M. Very restless; pulse 120, soft; face flushed; abdomen greatly distended. Prescription. Enema of warm water and molasses which moved the bowels freely; discharges contained much hardened feces. Prescription. Tinct. opii gutt. twenty-five, to be repeated if necessary.

17*th*. 9 A. M. Present, Drs. Boerstler, Minor, and Potter. Patient rested well through the night, and more comfortable this morning. Abdomen less distended; pulse 115, soft; skin soft and cool; face flushed. Condition of wound. The edges of the muscles were found to be firmly united; the integuments also adherent to muscles beneath. As the abdominal cavity evidently contained fluid, a small incision was made through its walls at the lower angle of the wound (by Dr. Boerstler), from which escaped two pints of blood in a state of decomposition, and very fetid. This fluid was examined by Dr. Boerstler with the following results: "Under the microscope the blood-disks were found very much broken down, and filled with air, which frequently coalesced under the field of vision. The liquor sanguinis presented the appearance of water in which flesh had been washed, and was filled with innumerable globules of from one to four lines in circumference (under a magni-

fying power of 120 diameter), which we supposed to be pus-globules. A portion of the blood was submitted to heat, nitric acid, and liquor potassa; not the slightest trace of fibrin could be detected. The liquor potassa produced a blackish precipitate, presenting under the microscope broken up pus-globules." Prescription. Sulph. morphia gr. half. Ordered beef tea for nourishment. 6 o'clock P. M. Wound discharges copiously; the character the same as this morning; no change in symptoms; appetite good. Prescription continued.

18*th.* 8 o'clock A. M. Patient rested well through the night; had one natural operation from the bowels; pulse 110, soft; skin natural; tongue moist; discharge from wound half a pint; character same as yesterday; 6 P. M. continues the same.

19*th.* 9 o'clock A. M. Present, Dr. Potter; patient quite comfortable; pulse 98, soft and more volume; skin cool; abdomen much reduced, with no pain or tenderness on pressure; can turn herself on either side with ease; discharge from wound during the night and this morning three-quarters of a pint of same colour and odour as yesterday, but more tenacious; flush of face gone. Takes her beef tea with relish. Pres. tinct. opii, if necessary to overcome restlessness. From this time she continued to improve gradually; the discharge from wound diminished and assumed a different character, becoming less fetid, and less appearance of blood, assuming daily more the character of pus. On the 28th of October, it was pure healthy pus, and small in quantity.

November 8*th.* The patient is able to be up, and walked across the room. The wound discharges a limpid serum without a trace of pus. Her health is good; she feels no inconvenience from the operation but weakness; bowels regular. Allowed her a more generous diet of animal food and porter.

11*th.* Either from over-exertion, a slight cold, or improper diet, our patient became feverish. Hot skin; flushed face; pulse 100, soft; some headache, with complete loss of appetite. There is also some tenderness of the abdomen, with a considerable degree of hardness. Discharge from lower angle of wound, again purulent; in quantity, about two tablespoonfuls in twenty-four hours; bowels constipated. Pres. R. Blue mass, ext. colocynth comp., āā grs. v. M. ft. pil. Fomentations to abdomen; toast-water, as both drink and nourishment. The use of porter suspended.

12*th.* 9 o'clock A. M. Found our patient better; bowels moved three times; discharges natural; pulse 96; skin, natural temperature; no thirst; abdomen still rather hard and tender; discharge from wound about same as at last note. Pres. pulv. Doveri grs. v. every three hours; fomentations continued.

13*th.* This morning found patient improved; pulse 90, soft; skin moist; appetite improving; less tenderness in abdomen. Pres. continued.

14*th.* Continues to improve; tenderness of abdomen much diminished; discharge from wound less; appetite good; bowels regular. From this time the patient recovered rapidly, and, on the 20th of November, was able to be up again; the wound entirely ceased discharging.

26*th.* Our patient is in the enjoyment of excellent health; is able to attend to her household duties. The wound has entirely healed. The space between the edges of the integuments, occasioned by the want of union by first intention, filled up by granulation, leaving a cicatrix of four lines in width. It is now about nine months since the operation was performed; the lady still continues to enjoy excellent health.

When we take into consideration the tissues involved, the terrible and ex-

tensive lesions in the peritoneum, the extent to which the intestine was detached from the mesentery, as well as the division of numerous bloodvessels so freely anastomosing with each other, as the arteries of the mesentery, it certainly presents a case, if not without a parallel in the annals of surgery, at least one of rare occurrence. It shows, in a remarkable degree, the power of nature to repair injuries.

The most remarkable feature in the case is that the bowels should maintain their integrity of function; that so extensive a lesion of the chyliferous vessels should be followed by no disturbance of the nutritive functions; so far as can be judged of from her general health it remains unimpaired. In truth, she recovered in as short a time, and with as little suffering, as patients generally do who have undergone the operation of ovariotomy.

I cannot conclude the report of this case without acknowledging my obligations to my friend Dr. Eels, who conducted its subsequent treatment, to whose skill and indefatigable attention may be, in a great manner, attributed the favourable termination of the case. Also for the minute details of the symptoms and treatment which he has kindly furnished. I would in this connection also acknowledge myself much indebted to my venerable and worthy friend Dr. Boerstler, for his valuable aid and attention to the case.

The case presents at least another instance of the difficulty and uncertainty of diagnosis, in abdominal tumours, and fully confirms the justness of the remarks of that distinguished physician, J. Macfarlane, M. D., of Glasgow. In his admirable *Clinical Reports*, he says:—

"There is not, in fact, a more difficult and uncertain part of medical practice than to distinguish between different tumours daily to be met with in the abdomen, or to obtain anything like conclusive or satisfactory evidence as to their origin and connections. It is this uncertainty of diagnosis, so generally felt and acknowledged, that renders the question regarding the propriety of surgical interference so interesting and important. This difficulty is increased, because, in all the artificial divisions of the abdomen, there is situated, not a single organ, but a variety of parts—in any one of which the tumour may be situated. If it exists in the centre of the abdomen, it may arise from the peritoneum, the omentum, the intestines, the mesentery, the stomach, &c.; if in the hypogastrium, from sources not less obscure, as the uterus, ovaria, cæcum, &c."

This obscurity of diagnosis can only be overcome by large experience and practical observation. Hence the value to the profession, and especially the junior members, of faithfully reported cases. I have given the case with the hope that the practical facts, and deductions to be drawn from them, will be of service to others, though it may subject me to the censure of some of my professional brethren who are opposed to such operations, and who may, perhaps, feel disposed to charge me, not only with error in diagnosis, but even rashness and an unwarrantable interference, in proceeding with the operation, after it was discovered to be located in the mesentery. But, feeling satisfied that, if we should abandon the operation, after so extensive a section of the abdomen, and leave the tumour, she would ultimately die from the increase of

the morbid growth, if she should even escape the immediate hazard of peritoneal inflammation, and being urged by the earnest desire of the husband to complete the operation if possible, I felt warranted in proceeding. The result is but another instance of the many achievements of modern surgery; though I would not be understood as advocating the Utopian doctrine, that *"the end justifies the means."*

ART. VIII.—*A Case of Leucocythemia.* Communicated by ADDINELL HEWSON, M. D., Resident of Pennsylvania Hospital [with a wood-cut].

IN a series of papers published in various numbers of the *Edinburgh Monthly Journal of Medical Science*, for the years 1851-'52, Professor J. Hughes Bennett has called the attention of the profession to a peculiar condidition of the blood found in some cases of enlargement of the spleen, thyroid, and other lymphatic glands to which he has given the name of *leucocythemia*, from the increased number of white blood-cells found in such blood. These papers contain the histories of thirty-seven cases collected from various sources, and some very valuable remarks from Professor Bennett. From the fact that this peculiar condition of the blood has heretofore escaped the attention of the profession, and that it appears to throw some light on the functions of the spleen, these papers present much interest to the profession, and cannot be too widely disseminated in this country.*

As yet no cases of this blood disease have been published in this country, and we are therefore justified in presenting, in detail, the history of the following one, which came under our observation in December last, but which, owing to want of leisure, we have not before been able to present to the profession.

Charles Robinson, a native of Philadelphia, aged seventeen years, was admitted into the hospital, December 18, 1851, when he gave the following history of himself: He had just returned from a voyage at sea; had been to Wilmington, North Carolina, and to St. Martins (West Indies). He was in Wilmington in October, during the prevalence of the miasmatic fevers of that place, but was never unwell there. He then went to St. Martin's, from which place he sailed for Philadelphia, about the end of November; the voyage occupied twenty-three days. He was taken ill when a few days out from St. Martins, and continued so until his arrival here, when he sought admission into the hospital. He was anemic, lips and tongue blanched, lower extremities œdematous and feeble. Complained of no pain in any particular region, but of general debility. His first symptoms had been those of lassitude with pains in his limbs. He had never had intermittent in his life, and was confident

* We believe they have been collected and published in pamphlet form by Professor Bennett, in Edinburgh.